

ABSTRACT

5 A hub for a pulley, gear, or wheel is formed with an integral key or other integral means for preventing relative rotation and with an integral stop for positioning the hub axially on a shaft. The hub has a generally cylindrical opening for a shaft, an integral key extending inwardly into the shaft opening along at least part of the shaft opening for engaging a keyway in the shaft, and an integral mechanical stop covering at least a portion of one end of the shaft opening. The integral key preferably extends the entire length of the shaft opening. The mechanical stop preferably has an opening which is disposed at least around one end of the integral key. The mechanical stop serves to position the pulley, gear, or wheel precisely with respect to the end of a shaft when the pulley, gear, or wheel is assembled onto the shaft. The keyed hub is manufactured by powder metallurgy. One or more body plates are welded to the formed hub to form a pulley, gear, or wheel, or the hub is pressed into a body plate. The shaft opening may be formed with an integral flat or with a polygonal or splined cross-section to prevent rotation of the hub on its shaft, instead of, or in addition to, the integral key.